

CLAIMS

What is claimed is:

- 5 1. A power pricing plan rack equipment control method comprising:  
establishing a power pricing plan for operating rack equipment; and  
controlling operation of said rack equipment in accordance with said power  
pricing plan.
- 10 2. The method of claim 1, wherein controlling said operation includes said rack  
equipment performance settings.
3. The method of claim 1, wherein controlling said operation includes changing  
power consumption by said rack equipment in accordance with said power pricing  
15 plan.
4. The method of claim 3, wherein said power plan indicates a reduction in a  
voltage and a frequency of said rack equipment when a price for power increases.
- 20 5. The method of claim 3, wherein said power plan indicates an increase in a  
voltage and a frequency of said rack equipment when a price for power decreases.
6. The method of claim 1, wherein said controlling said operation comprises  
automatically adjusting said performance interactively.
- 25 7. The method of claim 1, further comprising:

receiving an indication of a power pricing change; and  
analyzing correspondence of said power pricing change to performance control  
instructions included in said power pricing plan.

- 5        8.     A computer-useable storage medium comprising computer-readable program  
code embodied therein for causing a computer system to implement a power pricing  
performance instructions comprising:
  - a power pricing detection module for detecting indications of power pricing  
fluctuations covered by a power pricing plan;
  - 10        a power pricing plan policy module for ascertaining power pricing plan  
instructions associated with said power pricing fluctuations; and  
an instruction generation module for generating rack equipment performance  
adjustment commands to implement said power pricing plan instructions.
- 15        9.     The computer storage medium of claim 8, further comprising a telemetry  
monitoring module for monitoring characteristics and activity of rack equipment  
associated with said adjustments commands.
- 20        10.    The computer storage medium of claim 8, further comprising a power pricing  
event spawning module for generating power pricing events.
11.      The computer storage medium of claim 8, wherein said instruction generation  
module comprises functionality for generating a command to postpone processing.

12. The computer storage medium of claim 8, wherein said power pricing plan information is an agreement between a host and a client and is structured in manner to accommodate business activities of said client.

5 13. The computer storage medium of claim 9, wherein said telemetry monitoring module also confirms said performance adjustments commands are complied with.

14. A power pricing rack equipment control system comprising:

rack equipment for processing data;

10 a power pricing plan component for controlling said rack equipment based on a power pricing plan policy; and

a communications bus for coupling said equipment and said power pricing plan control component, wherein said communications bus is utilized for communicating information between said power pricing plan control component and said rack

15 equipment.

15. The power pricing rack equipment control system of claim 14, wherein said power pricing plan component is operable to modulate power consumed by said rack equipment in accordance with said power pricing plan.

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16. The power pricing rack equipment control system of claim 14, wherein said power pricing plan component is operable to switch on and off said rack equipment in accordance with said power pricing plan.

17. The power pricing rack equipment control system of claim 14, further comprising a master management control center for coordinating control of rack equipment among a plurality of racks.

5 18. The power pricing rack equipment control system of claim 14, wherein said power pricing plan policy is dynamically adjustable on the fly.

19. The power pricing rack equipment control system of claim 14, wherein said power pricing plan policy is structured in accordance with business needs of a client.

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20. The power pricing rack equipment control system of claim 14, further comprising:

a memory for storing equipment information and power pricing plan policy information; and

15 a cross indexing component for cross indexing said equipment information and said power pricing plan policy information.